

Collector Best Management Practices: Electronic Waste

Proper handling of electronic waste protects site workers and the public and prevents pollution. It can also make electronics much more recyclable, and therefore profitable, than improper handling. The following list of best management practices for electronics collection sites could help save the entire electronics collection system money while making your site safer. Most of the suggestions below are not laws or specific requirements under the E-Cycle Wisconsin program, but will help protect human health and the environment.

Site selection

The ideal place to store collected electronics is in an indoor location. The next best option is in covered containers. The idea behind both storage techniques is to keep electronics out of the elements so that they do not crack, leak and weather. If covered storage is not possible, frequent pick-ups by your recycler can help make sure electronics remain recyclable.

Broken cathode ray tubes (CRTs) must be stored in a building with roof, floor and walls and in a container designed and constructed to contain dust.

Electronics contain valuable materials and sensitive data. It is a good idea to secure your site by locking buildings and gates and monitoring with video cameras to protect from theft, vandalism and illegal dumping. You may also want to store electronics in locked containers, especially if it is difficult to prevent unwanted access to your site.

Storage

Every collection site stores electronics in slightly different ways. Regardless of storage methods the following three practices apply:

- ✓ Keep all storage areas clean and orderly.
- ✓ Have an attendant on duty during open hours for security and to prevent mishandling and breakage of electronics.
- ✓ Send all materials off-site for recycling within one year of their arrival.

Work with your recycler to find the best way to store and package electronics so that it works for both of you while minimizing breakage. Recyclers will often provide you with packaging and may assist you in loading materials onto a truck. The suggestions below work for most sites, but if you use large roll-off containers only the stacking practices may apply to you.



This simple shed provides indoor storage and can be locked for security purposes.

- ✓ Consolidate electronics, with similar items placed in the same container. Label pallets or Gaylords with the predominant type of electronic device to be stored in each and the date that you began filling the container/pallet. For example, "Monitors—6/1/2014" or "Computer equipment—10/15/2014."
- ✓ Place Gaylords or other containers on pallets for safe loading.
- ✓ Gaylords placed on pallets can be used for all but very large items. Stack electronics as efficiently as possible inside Gaylords. Small, flat screen TVs and monitors can be placed upright with screens facing inward inside the Gaylord. Use shrink wrap to reinforce/cover Gaylords when full.
- ✓ Never drop CRTs into containers.
- ✓ Store large, flat screen TVs and monitors directly on pallets. Keep them upright with screens facing inward and shrink wrap them together to stabilize them for transport.
- ✓ Larger CRT TVs are often more easily stacked on pallets with screens placed face down on a cardboard cushion. Use shrink wrap to hold the pallet together and ensure it will remain secure during transport.
- ✓ Stacks on pallets should not exceed 5-7 feet. Stacks in Gaylords should not extend over the top of the container.



CRT televisions stacked on a pallet with screens facing inward and secured with shrink wrap.

Do not dismantle any electronics before sending them to your recycler, unless you have a specific agreement with your recycler to do so. This includes clipping cords, removing toner cartridges and removing batteries. Make sure you have talked with your recycler about how to handle items that come to your site already broken or dismantled.



Security concerns

Ensure that items containing data—including computers, cell phones and printers—are protected from theft, or inform your customers that your facility does not provide this service. Electronics that contain potentially sensitive data should be stored in areas with limited public access and/or attendants on duty, and should be locked when the site is closed. If you do not provide this service, explain to your customers that they can destroy data themselves or may want to choose a location that provides data security.

Surveillance equipment may help protect your site.



Proper management of broken electronics

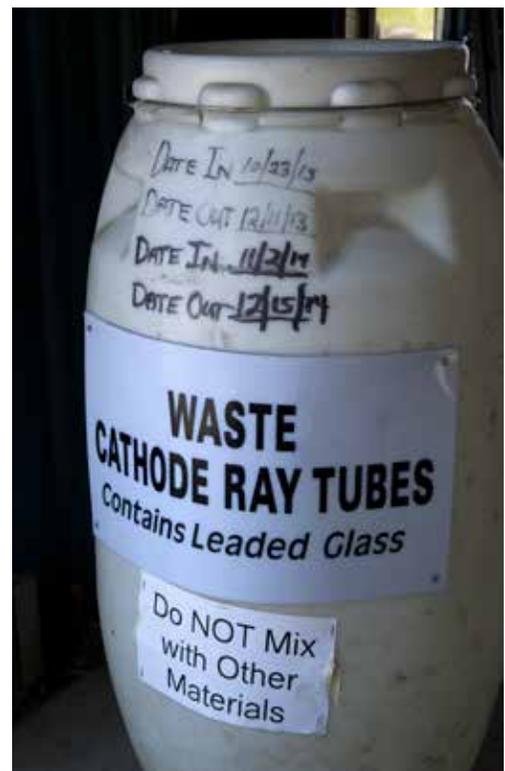
Any electronics that break on-site need to be cleaned up immediately. Broken CRT glass **must** be placed in a leak-proof, closeable container, such as a 55-gallon closed-top plastic drum, and stored indoors. Both of the following labels **must** be on the container: “Waste cathode ray tubes – contains leaded glass” and “Do not mix with other materials.” Your recycler may have additional handling requirements or charge a special fee for broken CRT glass. If your recycler will not accept broken CRT glass, check with other recyclers through the E-Cycle Wisconsin website.

If broken electronics are brought to your site, handle them the same way as electronics that break on-site (see above). You may want to consider charging the person bringing the broken device(s) an extra fee if your recycler will charge you. If you accept the electronics, you may want to specify that you will not accept broken electronics again. If you do not accept the electronics, try to help the person find someone who will accept them.

If you suspect someone is dismantling electronics and bringing you the parts, you may want to work with DNR E-Cycle Wisconsin staff to write a “cease and desist” letter. In any case, you may want to make note of the name or license number of the person with the broken electronics, especially if it is a large amount. This could assist in an investigation if materials are later found illegally dumped.

Recordkeeping

Keep records (bills of lading, other documentation) of the number of Gaylords, pallets or other containers delivered to recyclers and the approximate weight of each shipment, if known. Record where and when you send materials for processing. Cross check the information you collect with the information provided to you from your recycler.



Clearly labeled broken CRT glass container.

More information

For more information about collector requirements and resources, visit dnr.wi.gov and search "ecycle." You may also call the DNR Waste and Materials Management program at (608) 266-2111 to be referred to a recycling specialist.



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